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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,652	07/28/2003	Kent Dirksen Kasper	600.1283	4422

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EXAMINER

YAN, REN LUO

ART UNIT PAPER NUMBER

2854

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,652

Applicant(s)

KASPER ET AL.

Examiner

Ren L. Yan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-14, 16-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-14, 16-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

In view of the Appeal Brief filed on 9-18-2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Granger(3,585,932).

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The patent to Granger teaches the structure of a fluid delivery device for a printing machine as claimed including a rotating roller 14 having a roller surface for carrying a fluid film it picked up from an ink supply container 36, a metering element 61(ink control blade) having an edge for splitting the fluid film and a first concave surface 62 facing the roller surface, the metering element being movable with respect to the roller surface. Granger teaches the ink control blade 61 that accurately controls the thickness and uniformity of the film of ink because the position of concave surface 62 in relation to the surface of the roller 14 can be accurately adjusted by the provided structure. See Figs. 1 and 2, the abstract, column 3, lines 14-39, and claim 1 in Granger for details. Since Granger teaches the exact structural arrangement of a fluid delivery device for a printing machine as recited, the fluid delivery device of Granger is well capable of achieving the recited functional outcome as recited, wherein a thickness of the fluid film downstream from the metering element is half of an average distance of the concave surface from the roller surface. With respect to claim 21, Granger shows an ink supply container 36, the roller surface 14 contacting the fluid supply container and the fluid film before splitting exiting the supply container as recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-9, 12-14, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shriver(5,003,875) in view of Granger(3,585,932). The patent to Shriver teaches the method and apparatus of a fluid delivery device for a printing machine as claimed

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including a rotating roller 32, a fluid supply container 26 for supplying a fluid film to the rotating roller surface, a metering element 150 having an edge for splitting the fluid film and a first surface facing the roller surface, and an adjustment mechanism 176-180 for moving the metering element 150 relative to the roller surface along a radial line from a center of the rotating roller.

See Fig. 6 and the paragraph bridging columns 3 and 4 in Shriver for details. However, Shriver does not teach the first surface of the metering element 150 to be a concave surface. The patent to Granger teaches a fluid delivery device for a printing machine including a metering element 61 that has a concave surface 62 facing the rotating roller surface 14 and the curvature of the concave surface 62 has the same or very nearly the same radius as the roller 14. See Fig. 2, the abstract and column 4, lines 14-39 in Granger for example. It would have been obvious to those having ordinary skill in the art to provide the metering element of Shriver with the concave surface appropriately disposed as taught by Granger so as to accurately set the position of the concave surface with respect to rotating roller surface in order to accurately control the thickness and uniformity of the film of ink. Regarding claims 2 and 14, the metering element 150 of Shriver shows a second concave surface opposite the first surface as recited. With respect to claim 6, the metering element 150 of Shriver has a horizontal bottom surface as recited.

With respect to claim 4, the combination of Shriver and Granger teaches all that is claimed except that it does not specifically state that the concave surface being an arc of 10 degrees(out of a total of 360 degrees for the roller's circumferential surface) or more of the roller surface as recited, even though the concave surface of the ink control blade 61 in Granger appears to be an arc of 10 degrees or more of the roller surface as recited. Since Granger teaches the use of a concave surface 62 for the ink control blade 61 adjustably positioned relative

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to the roller surface in order to accurately control the thickness and uniformity of the ink film on the roller surface, the length of such a concave surface with respect to the length of the roller surface would have been determined by those having ordinary skill in the art through routine experimentations in order to achieve the ideal ink film thickness and uniformity on the roller surface. Such a determination through routine experimentations would have been obvious to those ordinary skill in the art. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

With respect to claim 23, see the discussion regarding claim 21 above.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shriver in view of Granger as applied to claim 1 above, and further in view of Dahlgren((3,664,261). Shriver, as modified by Granger, teaches all that is claimed except for the metering element being rigid. Dahlgren teaches in a fluid delivery device the conventionality of using a rigid doctor blade(same as the metering element). See column 5, lines 13-18 in Dahlgren for example. It would have been obvious to those having ordinary skill in the art to provide the fluid delivery device of Shriver, as modified by Granger, with a rigid metering element as taught by Dahlgren so as to achieve a controlled, uniform rate of fluid delivery as demanded by the printing layout.

Claims 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granger(3,585,932). The patent to Granger teaches the structure of a fluid delivery device for a

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printing machine as claimed including a rotating roller 14 having a roller surface for carrying a fluid film it picked up from an ink supply container 36, a metering element 61 (ink control blade) having an edge for splitting the fluid film and a first concave surface 62 facing the roller surface, the metering element being movable with respect to the roller surface. Granger teaches the ink control blade 61 that accurately controls the thickness and uniformity of the film of ink because the position of concave surface 62 in relation to the surface of the roller 14 can be accurately adjusted by the provided structure. See Figs. 1 and 2, the abstract, column 3, lines 14-39, and claim 1 in Granger for details. Granger does not specifically state that the concave surface being an arc of 10 degrees (out of a total of 360 degrees for the roller's circumferential surface) or more of the roller surface as recited, even though the concave surface of the ink control blade 61 in Granger appears to be an arc of 10 degrees or more of the roller surface as recited. Since Granger teaches the use of a concave surface 62 for the ink control blade 61 adjustably positioned relative to the roller surface in order to accurately control the thickness and uniformity of the ink film on the roller surface, the size of such a concave surface with respect to the size of the roller surface would have been determined by those having ordinary skill in the art through routine experimentations in order to achieve the ideal ink film thickness and uniformity on the roller surface. Such a determination through routine experimentations would have been obvious to those ordinary skill in the art. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not

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perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. With respect to claim 22, see the discussion regarding claim 21 above.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shriver in view of Granger as applied to claim 1 above, and further in view of Kistler et al(6,450,097). Shriver, as modified by Granger teaches all that is claimed except for the use of a reducer roll interacting with the rotating roller. Kistler et al teach in a fluid delivery device for a printing machine including a rotating roller 5 for carrying a fluid film on its surface, a metering element 4 having an edge for splitting the fluid film and being movable with respect to the roller surface, and a reducer roll 9 interacting with the rotating roller 5. See Fig. 1 in Kistler et al for example. It would have been obvious to those having ordinary skill in the art to provide the fluid delivery device of Shriver, as modified by Granger with the reducer roll appropriately disposed as taught by Kistler et al in order to further regulate the amount of fluid carried by the rotating roller to be transferred to the downstream printing cylinders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ren L Yan
Primary Examiner
Art Unit 2854

Ren Yan
Nov. 20, 2006



JUDY NGUYEN
SUPERVISORY PATENT EXAMINER